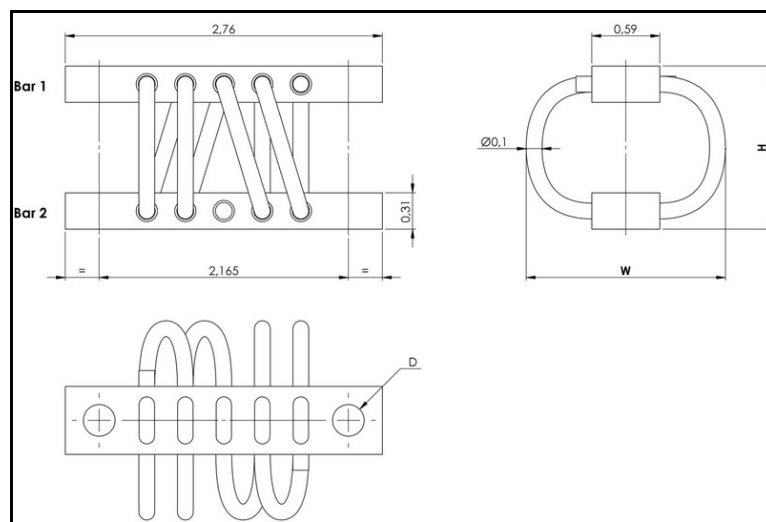


# WIRE ROPE ISOLATOR

DEFINITION  
**series HH4**



- All metal multidirectional anti-vibration/shock mounts
- Exceptional reliability and long life
- High damping
- No aging
- Corrosion resistant
- Unequalled temperature range : - 180°C to 300°C (-290°F to 570°F)
- Great adaptability/versatility

**Specials on request**

(material size and number of loops, etc.)

*Dimensions are in inches. For reference only*

| SERIES                                              |
|-----------------------------------------------------|
| Materials and finishes<br>(meets RoHS requirements) |
| <b>HH4</b>                                          |
| <b>Cable:</b><br>stainless steel                    |
| <b>Retainer bars:</b><br>aluminium alloy/<br>SurTec |
| Other materials on request                          |

| MODEL | height<br>H (in) | width<br>W (in) | weight<br>(lbs) |
|-------|------------------|-----------------|-----------------|
| -304  | 1,1              | 1,5             | 0,11            |
| -404  | 1,2              | 1,5             | 0,11            |
| -504  | 1,3              | 1,7             | 0,13            |
| -604  | 1,4              | 1,7             | 0,13            |
| -704  | 1,5              | 1,9             | 0,13            |
| -804  | 1,6              | 1,9             | 0,13            |
| -904  | 1,7              | 2,0             | 0,13            |
| -1004 | 2,0              | 2,4             | 0,15            |
| -1104 | 2,1              | 2,5             | 0,15            |
| -1204 | 2,1              | 2,8             | 0,15            |
| -1304 | 2,2              | 3,1             | 0,15            |

| INTERFACES                              |                         |                                         |              |
|-----------------------------------------|-------------------------|-----------------------------------------|--------------|
| fixtures holes D                        | Bar 1                   |                                         |              |
|                                         | ø 0.28 in through holes | ø 0.28 in through holes countersunk 82° | 1/4 - 20     |
| Bar 2                                   |                         |                                         |              |
| ø 0.28 in through holes                 | T2                      | not standard                            | not standard |
| ø 0.28 in through holes countersunk 82° | TC                      | C2                                      | not standard |
| 1/4 - 20                                | TI                      | CI                                      | I2           |

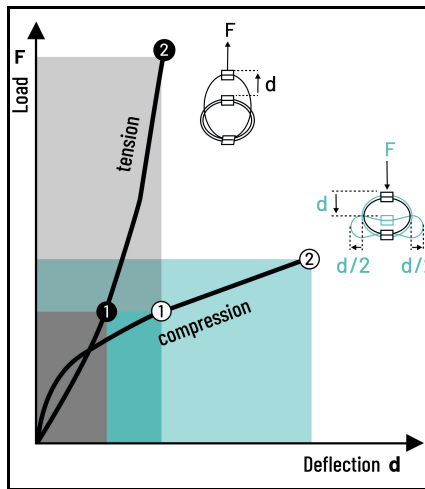
|   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|
| H | H | 4 | - | 3 | 0 | 4 | C | I |
|---|---|---|---|---|---|---|---|---|

**SERIE: HH4**  
'Half-Helical' mount  
from the HH4 series

**MODEL: -304**  
height: 1,1in  
width: 1,5in  
weight: 0,11lbs  
loops: serie standard is 04  
loops

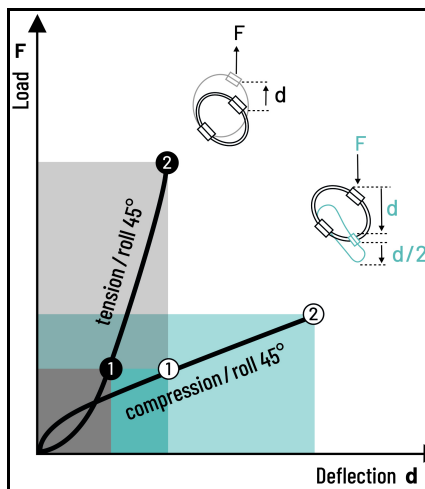
**INTERFACE: CI**  
ø 0.28 in through  
holes countersunk  
82° in bar 1,  
1/4 - 20 in bar 2





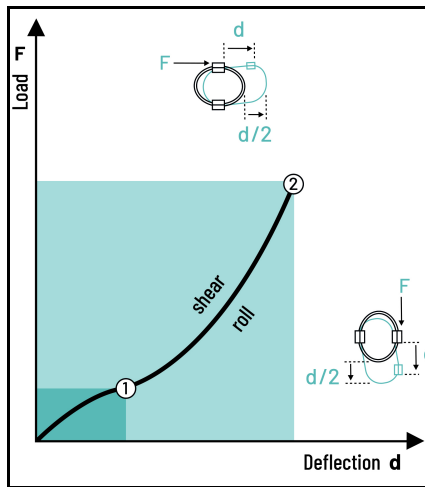
## COMPRESSION AND TENSION

| HH4 Series      | Model | -304 | -404 | -504 | -604 | -704 | -804 | -904 | -1004 | -1104 | -1204 | -1304 |
|-----------------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1.Max Static    | F lbf | 28   | 24   | 20   | 18   | 16   | 14   | 12   | 8,8   | 8,2   | 6,3   | 4,8   |
|                 | d in  | 0,08 | 0,09 | 0,11 | 0,12 | 0,14 | 0,15 | 0,17 | 0,22  | 0,23  | 0,25  | 0,27  |
| 2.Max Shock     | F lbf | 83   | 73   | 61   | 54   | 47   | 42   | 37   | 26    | 25    | 19    | 15    |
|                 | d in  | 0,43 | 0,50 | 0,60 | 0,71 | 0,78 | 0,89 | 0,99 | 1,2   | 1,3   | 1,3   | 1,5   |
| 3.Max Vibration | 2a in | 0,05 | 0,05 | 0,07 | 0,08 | 0,09 | 0,10 | 0,11 | 0,14  | 0,14  | 0,15  | 0,16  |
|                 | f Hz  | 14,1 | 13,1 | 11,9 | 11,1 | 10,5 | 10,0 | 9,4  | 8,4   | 8,1   | 7,9   | 7,5   |
| 1.Max Static    | F lbf | 28   | 24   | 20   | 18   | 16   | 14   | 12   | 8,8   | 8,2   | 6,3   | 4,8   |
|                 | d in  | 0,06 | 0,06 | 0,08 | 0,08 | 0,09 | 0,10 | 0,11 | 0,15  | 0,16  | 0,20  | 0,24  |
| 2.Max Shock     | F lbf | 260  | 230  | 190  | 160  | 140  | 120  | 110  | 79    | 74    | 66    | 56    |
|                 | d in  | 0,24 | 0,26 | 0,31 | 0,32 | 0,38 | 0,39 | 0,43 | 0,59  | 0,62  | 0,89  | 1,2   |
| 3.Max Vibration | 2a in | 0,03 | 0,03 | 0,03 | 0,03 | 0,04 | 0,04 | 0,05 | 0,06  | 0,07  | 0,10  | 0,13  |
|                 | f Hz  | 19,6 | 18,4 | 17,0 | 16,6 | 15,3 | 15,0 | 14,2 | 12,2  | 11,9  | 10,2  | 9,1   |



## COMPRESSION/ROLL 45° - TENSION/ROLL 45°

| HH4 Series      | Model | -304 | -404 | -504 | -604 | -704 | -804 | -904 | -1004 | -1104 | -1204 | -1304 |
|-----------------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1.Max Static    | F lbf | 21   | 18   | 15   | 14   | 12   | 11   | 9,2  | 6,6   | 6,2   | 4,7   | 3,6   |
|                 | d in  | 0,10 | 0,12 | 0,15 | 0,15 | 0,16 | 0,19 | 0,21 | 0,25  | 0,26  | 0,36  | 0,37  |
| 2.Max Shock     | F lbf | 54   | 47   | 39   | 34   | 30   | 27   | 23   | 17    | 16    | 12    | 9,8   |
|                 | d in  | 0,64 | 0,74 | 0,90 | 1,1  | 1,2  | 1,3  | 1,5  | 1,9   | 2,0   | 2,0   | 2,2   |
| 3.Max Vibration | 2a in | 0,07 | 0,08 | 0,10 | 0,12 | 0,13 | 0,15 | 0,16 | 0,20  | 0,22  | 0,22  | 0,24  |
|                 | f Hz  | 10,6 | 9,8  | 8,9  | 8,4  | 8,0  | 7,5  | 7,1  | 6,3   | 6,2   | 5,8   | 5,6   |
| 1.Max Static    | F lbf | 21   | 18   | 15   | 14   | 12   | 11   | 9,2  | 6,6   | 6,2   | 4,7   | 3,6   |
|                 | d in  | 0,07 | 0,08 | 0,10 | 0,11 | 0,12 | 0,13 | 0,14 | 0,18  | 0,19  | 0,25  | 0,27  |
| 2.Max Shock     | F lbf | 130  | 110  | 93   | 78   | 70   | 60   | 52   | 39    | 36    | 33    | 28    |
|                 | d in  | 0,27 | 0,30 | 0,35 | 0,36 | 0,43 | 0,44 | 0,49 | 0,68  | 0,71  | 1,0   | 1,3   |
| 3.Max Vibration | 2a in | 0,03 | 0,03 | 0,04 | 0,04 | 0,05 | 0,05 | 0,05 | 0,07  | 0,08  | 0,11  | 0,15  |
|                 | f Hz  | 15,8 | 14,8 | 13,8 | 13,4 | 12,4 | 12,1 | 11,5 | 9,8   | 9,6   | 8,3   | 7,3   |



## SHEAR OR ROLL

| HH4 Series      | Model | -304 | -404 | -504 | -604 | -704 | -804 | -904 | -1004 | -1104 | -1204 | -1304 |
|-----------------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| 1.Max Static    | F lbf | 14   | 12   | 10   | 9,0  | 7,8  | 7,0  | 6,1  | 4,4   | 4,1   | 3,1   | 2,4   |
|                 | d in  | 0,10 | 0,12 | 0,14 | 0,18 | 0,19 | 0,22 | 0,27 | 0,32  | 0,34  | 0,33  | 0,38  |
| 2.Max Shock     | F lbf | 73   | 62   | 49   | 40   | 36   | 30   | 26   | 19    | 18    | 16    | 14    |
|                 | d in  | 0,38 | 0,44 | 0,52 | 0,58 | 0,66 | 0,72 | 0,80 | 1,0   | 1,1   | 1,3   | 1,6   |
| 3.Max Vibration | 2a in | 0,04 | 0,05 | 0,06 | 0,06 | 0,07 | 0,08 | 0,09 | 0,11  | 0,12  | 0,14  | 0,17  |
|                 | f Hz  | 5,6  | 5,3  | 4,9  | 4,7  | 4,4  | 4,3  | 4,1  | 3,6   | 3,5   | 3,0   | 2,7   |

1. Max static load (F) with corresponding deflection (d)
2. Max shock load (F) with corresponding deflection (d)
3. Uncoupled resonant frequency (f) under max static loading 1. and max peak to peak sinusoidal vibration input (2a)

**\*IMPORTANT:** Performance characteristics are given here for reference only. They can be increased under specific conditions. Contact us

## TYPICAL SHOCK/VIBRATION SPECIFICATIONS:

|               |                                                                                     |
|---------------|-------------------------------------------------------------------------------------|
| Air           | AIR 7306, MIL-E-5400, MIL-C-172, MIL-STD-810                                        |
| Ground Forces | GAM EG13A, SEFT 001, MIL-STD-810, VG 9533                                           |
| Marine        | GAM EG13C, IT25-21/96-31/15-86, MIL-S-167, MIL-S-901, STANAG 042, BV 043.73, BV 044 |
| Others        | GAM EMB1, GAM EMBT4, DEF STAN 07-55, IEC 571, FINABEL 2C                            |